

Here Comes Atari Logo

by
Shoneen Gervich

Atari Logo is on the way! Boasting four turtles, floating point arithmetic, and a full array of list processing capabilities, it has the potential to become one of the most popular versions of Logo. Developed by LCSi to take advantage of the unique capabilities of the Atari computers, it features most of the "usual" Logo primitives plus some exciting new ones which give the Logo juggling act a completely different slant.

THUNDERING TURTLES

A herd of four turtles is available to carry out both individual and collective commands. That is, each turtle can move independently or in concert with the others, responding to primitives such as TELL, ASK, EACH, and WHO.

Moreover, these turtles actually look like turtles instead of the sometimes confusing triangles. Each has a round body with four legs and a tail. A turtle head points clearly in the direction of the heading.

TURTLE CONTROLS

Each turtle has three pens, each of which can draw in any of 128 different colors. Moreover, each of these colors is available for the background, and for the colors of the turtles themselves. The Atari palette will give your students color possibilities which are practically unlimited.

The drawing speeds of the turtles can be controlled by the primitive SETSP and a number from 0 to 199. Thus, a turtle which has been told SETSP 5 will draw rather slowly, a feature perhaps useful with beginners, while one with SETSP 150 will draw

much faster. Also, a line drawn at high speed will be less solid than one drawn slowly, giving an added texture capability.

The Atari Logo turtles can change shape, making it possible to create animated sequences. Up to 15 user-defined shapes may be in memory at any one time. Cars, planes, human figures, animals, and the like can come to life on the screen very easily by rapidly changing turtles from one shape to another, in a manner similar to that often done with the TI LOGO Sprites.

Possibly the most unique feature of Atari Logo is its collision detection. Beings called "WHEN Demons" check to see when specified turtles collide or when they cross lines. Predetermined lists of commands are then carried out. For example, if Turtle 1 and Turtle 3 collide, they could change shape or rebound or almost anything else imaginable.

The TOOT primitive will create sounds which can be played through the speaker of the television. Frequency, duration, and volume may be specified for two voices, making it possible to compose music, create special effects, and the like.

With Atari Logo, the heart-felt desire of almost every child to create a video game is now within reach.

NUTS AND BOLTS

Atari Logo comes in a plug-in 16K ROM cartridge which will fit the 400, 800, and 1200 models and their successors. When used with a 48K machine, such as the 800, Atari Logo has about one thousand more nodes of memory available in the workspace than any of the Apple versions.

Atari Logo comes with a reference card, and two books, "Introduction to Programming Through Turtle Graphics" and "Atari Logo Reference Manual."

A disk drive is recommended, in order to take full advantage of the language. Storage and retrieval tasks are straightforward.

The cost of an Atari Logo system is quite low. The language, a disk drive, and 64K computer can be put together for under \$900. By using a tape cassette storage system and the 16K computer, you can drive the price below \$400. This is about the lowest price you will find for a full Logo implementation.

EFFECTS

You may expect Atari Logo to have a significant effect on both teachers and students, and on the teaching of Logo.

The wealth of options available with Atari Logo will stimulate those already familiar with other versions of the language, and will serve as a beckoning enticement to those contemplating entering the Logo microworlds for the first time.

The multiple turtle capability makes possible new ways of thinking about solving problems. Turtle control becomes more complex, more challenging. Creativity and imagination become even more important.

Atari has made Logo affordable, powerful, and irresistible. It is up to us and our students to make the most of it.

(For more information, write: Atari Logo, PO Box 16525, Denver CO 80216 — Ed.)

Shoneen Gervich teaches children's classes in PILOT, Logo, and (only if she has to) BASIC, through various community agencies in the South Bay area of San Francisco.

NLX Back Issues Available

A limited number of sets of Volume 1 of The National Logo Exchange newsletter are available, covering the period from September 1982 through May 1983. Many beginning Logo teachers have found this set to be a helpful resource for ideas and activities, as well as for general Logo information. To order your set, send \$25 to NLX Volume 1, PO Box 5341, Charlottesville VA 22905.

From The Editor

September always has a special zing to it, doesn't it? There is something invigorating about hallways alive with young people once more. Facing a class full of new friends and new challenges is stimulating. And, of course, having Logo in your lesson plans for the coming year is exciting!

This school year is going to be one of incredible growth for Logo. Thousands of teachers everywhere are starting to use it in their classrooms. More and more versions are being released for more and more computers. Several Logo books are being published, and more are on the way. Nearly every educational computing magazine now has a Logo section.

This growth has excited many people: teachers, parents, administrators, professors, software developers, publishers. And the children are the most excited of all!

With you, we welcome this growth. Our motto FORWARD 100! was chosen to reflect this attitude. FORWARD is the direction of progress, improvement, growth. 100% of our newsletter supports you, the Logo teachers. The exclamation mark represents the excitement Logo brings to learning. By working together and sharing Logo ideas, we can multiply this growth to proportions that cannot be imagined. Your students are the direct beneficiaries of this growth!

To all our earlier subscribers, we send a hearty WELCOME BACK! We appreciated meeting you last year, and look forward to working with you again this school year. To our many new subscribers, we extend a special HELLO! We hope that this year will be one of healthy challenges and professional growth for all of us.

As a personal note, I'd like to add that, after 13 years of marriage, my wife, Posy, and I have been blessed with a child! We are pleased that our son, Kyser, will be able to grow up with Logo, and with Logo teachers such as you!

FORWARD 100!

